

Prisma Access Insights 2.0

TDM



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Agenda

- What is Prisma Access Insights?
- Prisma Access Insights App
- What's new with PAI-2.0
 - Service Connection
 - Multi-Tenancy
 - New Alerts and Subscription Option
- Navigate Prisma Access Insights
 - Dashboard Summary
 - Remote Networks
 - Mobile Users
 - Prisma Access Locations
 - Tunnels
 - Alerts

What is Prisma Access Insights?

The Prisma Access Insights gives you a way to continuously monitor your Prisma Access environment. When an event or status requires your attention, Insights sends you alert notifications which helps you take proactive action or gain visibility into the remediation measure by Prisma Access Team.

For every Prisma Access instance your organization owns, a corresponding Prima Access App instance is created be it Cloud Managed or Panorama Managed.

Multiple dashboards give you focused views of your different deployments, alerts, and the Prisma Access infrastructure. You can adjust and toggle your view to evaluate trends over time or examine data from a different angle. Drilldown for details on specific users, sites, connections, or Prisma Access infrastructure components.

How to view Prisma Access Insights 2.0

Prisma Access Insights App is now integrated with Prisma Access App and will no longer be available as a standalone app on the Hub.

Prisma Access features like Logs and Reports will be available to all customers by default

Panorama Managed Prisma Access:

All the Supernatant/subtenant will be merged into a new Prisma Access App

Cloud Managed Prisma Access:

All the tenants will merge into their existing Prisma Access Apps.



Prisma Access App

From Hub:

The Hub is a single place where you can access all of the Palo Alto Networks Cloud Services and Apps for your Organization.

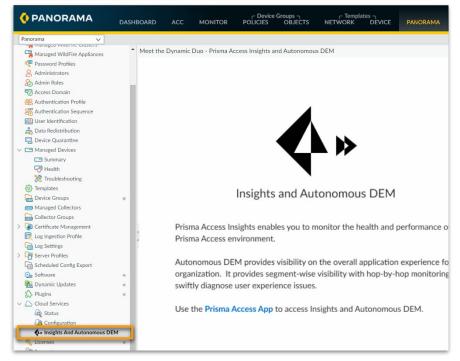
Use the credentials associated with your Palo Alto Networks Customer Support Account to log in to the Hub. Click on the Prisma Access App.

If you are not able to see the app, it might be because you are not assigned the correct Hub App role

From Panorama:

Panorama > Cloud Services > Insights and Autonomous DEM



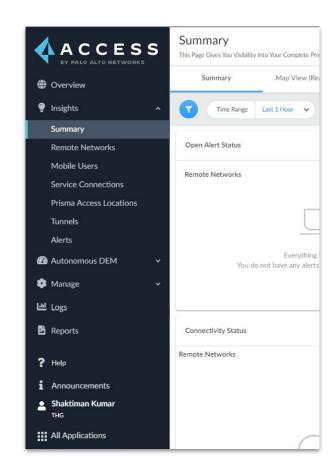


Cloud Managed PAI

Each Prisma Access App manages an individual tenant and now PAI App is integrated within the corresponding Prisma Access Apps.

App Permission:

The permissions from the existing Prisma Access App will be maintained.



Panorama Managed PAI

Prisma Access app will not allow to provision and make config changes if the Prisma Access environment is managed by Panorama

Panorama Managed customers with the existing plugin (PA-2.0 preferred plugin) and customers who have bookmarked the Insights 1.0 URL will be automatically redirected to the hub

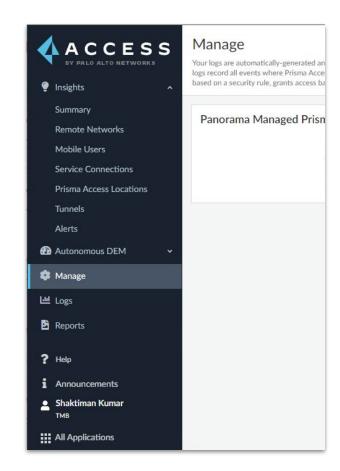
Panorama customers with PA-2.0 Innovation plugin will automatically get redirected to Insights 2.0 within the Prisma Access App.

Default instance name for the new Prisma Access App will be constructed with <PanoramaSerialNumber - Region - Prisma Access>

App Permission:

The permissions for the new Prisma Access will remain on the existing Panorama App like before.

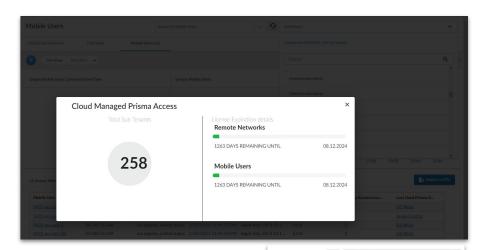




Multi-Tenancy Support

Multi-Tenancy Support

- Admin gains visibility across all the sub-tenants and will be able to choose a specific tenant to drill down into
- Drop down lists all the sub tenants configured for this super tenant
- License information is available at the super tenant level and not the sub tenant level

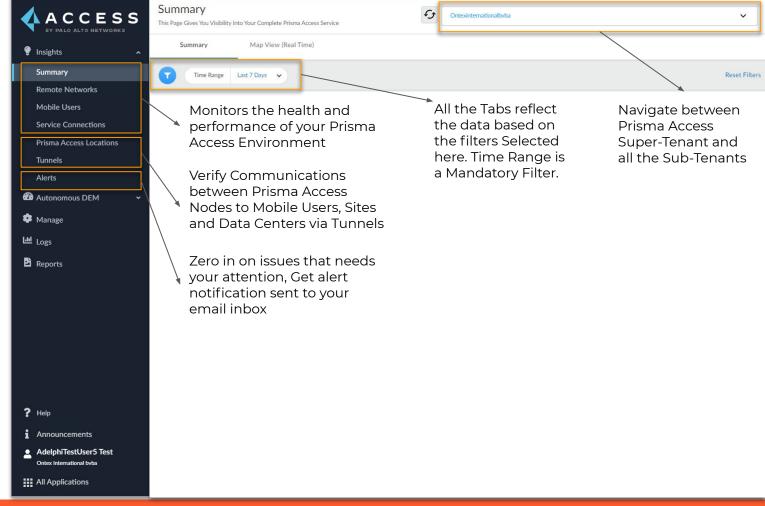




Navigate Prisma Access Insights

Navigate Prisma Access Insights

MU: Mobile Users RN: Remote Networks SC: Service Connections



Time Range

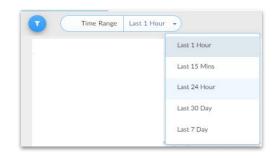
Data displayed in all the Graphs and Charts depend on the Time Range selected. Time has been localized so you will be able to filter down based on the local time for your region.

Data is fetched every 1 min and visualized at a 1 min granularity

Example:

Current Time: 10:30 PM Nov 16th

Latest Data Fetch Time on Insights: 9:28 PM Nov 16th UTC



Last 15 Min:

1 Datapoint for every single minute: 15 Datapoints First Datapoint: 9:14 PM UTC, Nov 16th UTC Latest Datapoint: 9:28 PM UTC, Nov 16th UTC

Last 1 Hour:

1 Datapoint for every single Minute: 60 Datapoints

Last 24 Hours:

1 Datapoint for every single Hour: 24 Datapoints







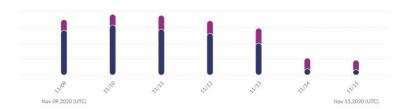
Time Range

Last 7 Days:

1 Datapoint for every single Day: 7 Datapoints

Last 30 Days:

1 Datapoint for every single Day: 30 Datapoints





Summary Dashboard

Summary Dashboard

This is the default landing page designed for a high-level Overview of the overall Prisma Access Environment

You can view all the **open alerts** across RN, SC, and MU, **connectivity status** of your network as well as License expiration details on the super tenant level

Default Filter:

Time Range: Last 1 Hr

You can additionally filter by a specific Prisma Access Location, Tunnel Name, Tunnel State, and Tunnel Monitoring Status



Summary > Open Alerts



Open Alerts

View all the open alerts by severity across Remote Networks, Mobile Users & Service connections

The legend shows the aggregate of all the open alerts across the three entities by severity

View all alerts takes you to the alerts dashboard that displays all the alerts, alert distribution over time, and the list of all alerts in the environment

Summary > Connectivity Status

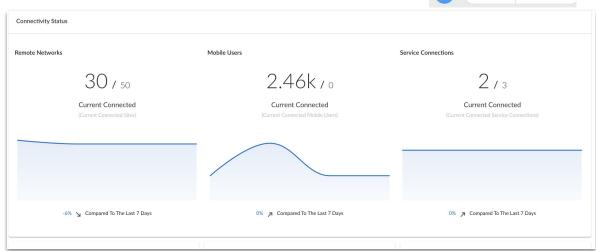


Remote Networks

View the current connected remote networks as of the **last minute** out of all the configured remote networks along with the percentage increase or decrease from the last period based on the time filter

Mobile Users

View the current connected mobile users - as of the **last minute** out of all the licensed MU users along with the percentage increase or decrease from the last period based on the time filter



Service connections

View the current connected service connections as of the **last minute** out of all the configured Service Connections along with the percentage increase or decrease from the last period based on the time filter

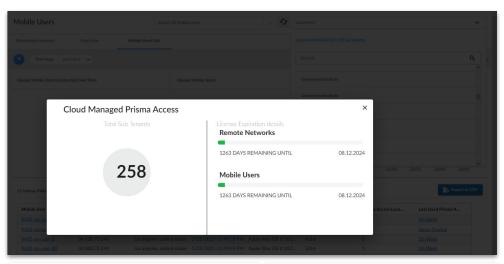
Summary > License Expiration

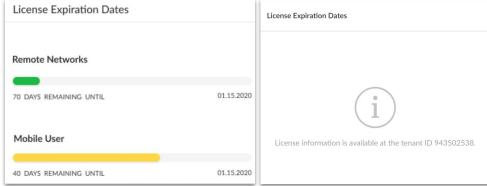
Understand when your RN and MU licenses will expire and how long before they expire. The details in the widget will be conditionally displayed based on the tenant chosen

Super Tenant Level

- The license Expiration date
- Number of days remaining until the expiration date

Sub tenant level - the sub-tenant level does not display license expiration details since it is not pertinent to the specific sub tenant



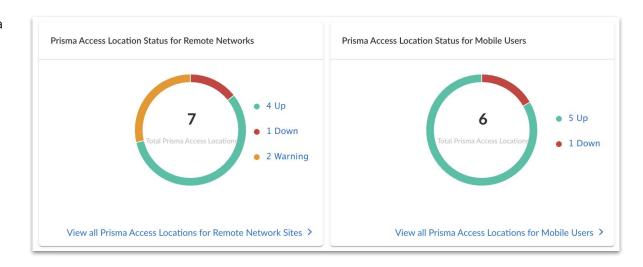




Summary > Prisma Access Location Status for RN/ MU

Understand the overall status of Prisma Access locations for Remote Networks and Mobile Users

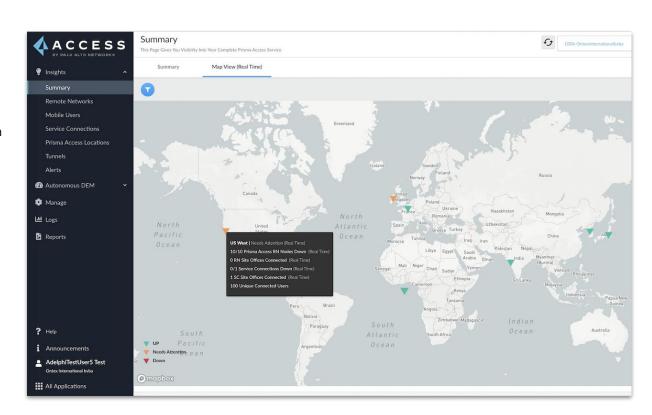
- Up all the instances are up
- Down all the instances are down
- Warning 1 or more than one instances are down



Dashboard > Summary > Map View

Shows the Status of all the PA locations on a Map in Real Time. Hover on any location icon to see more details like:

- Locations Status
- Number of Nodes at each location
- Number of RN sites connected
- Number of Service connections connected
- Number of SC site offices connected
- Number of Unique Mobile Users
 Connected



Dashboard > Summary > Map View



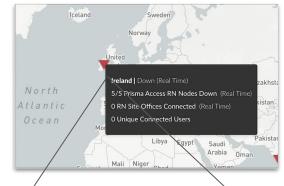
Mouse hover on the Icons to get more details. Each location can have both RN, MU and SC Nodes.

Here no RN nodes are down, 10 RN Sites are connected and 0 Unique users are connected

Icon color is based on the status of the Nodes at each Location.

- Green: All Nodes are up
- Yellow: 1 or more Nodes Down
- Red: All the Nodes are down

Scroll mouse to zoom in and out on the map to drill into a specific location or get an overview of the wider location



Click Icon to jump to a new tab for more details Location shows down as 0 Sites are connected



Remote Networks

Remote Network > Monitoring Summary

Shows the Summary View of the Remote Networks, like Alerts, PA Location Status, Sites and Tunnel Status, and Bandwidth Utilization.

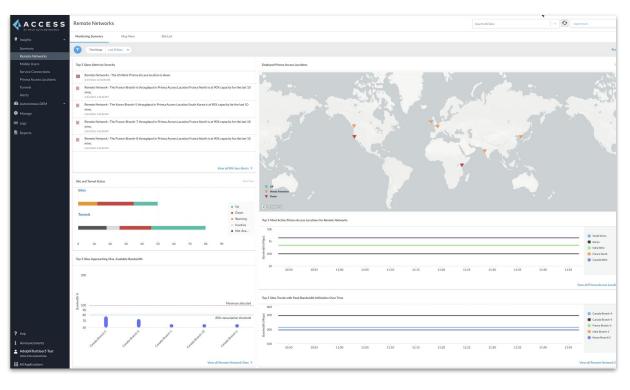
Top-5 Open Alerts by Severity to get the current issues on the RNs and if there is an action required.

Click into View all alerts to view all the alerts in the Prisma Access infrastructure in the Alerts dashboard

Gauge overall statuses of the tunnels and sites and their connectivity status

Assess all the utilization metrics - by analyzing

- Top 5 sites approaching Max bandwidth utilization
- Top 5 most active Prisma Access locations
- Trends of Utilization across top 5 sites



Remote Network > Monitoring Summary > Sites and Tunnel Status

The widget shows a higher number of tunnels than the sites as One or more RN-Sites can have more than one tunnel to an RN Node.

You can Mouse Hover to see the number and status for the Site and or the tunnel.

Site Status:

Indicates that the Tunnel between the Site and the RN Node is UP/Down, this may or may not cause traffic drop based on the config.

Down
 When all the tunnels are down, Site i Down

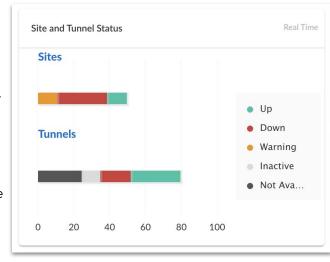
Up when all the tunnels for the Site are up, the Site is Up.

• Warning if at least one tunnel is down for the Site, Site is in warning state

Tunnels Status:

- Not Available Tunnel in init state or never initiated after configuration.
- DownIf the tunnel is Down
- Up If the tunnel is UP
- Inactive
 When the PA Nodes stops sending tunnel status (when tunnel is removed from config)
 - Or due to any reason if no Tunnel Status reported for 4 mins continuously

We see I Warning here which means that the status has multiple tunnels and at least one of them is down, thus it may not cause Network Outage but it can still increase latency.

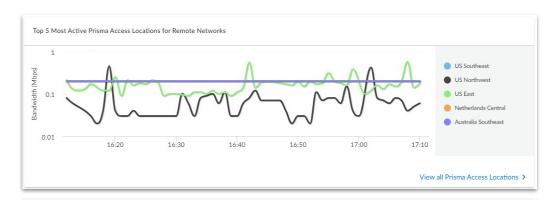


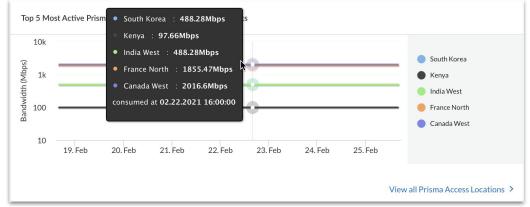
Remote Network > Monitoring Summary > Bandwidth Consumption across Prisma Access Locations

The Top 5 most Active Locations for Remote Networks enable you to understand the Prisma Access Locations that have the most bandwidth consumption for remote networks

View the trend over time based on the time filter that has been selected.

Hover over the trend lines for insights into bandwidth consumed at that specific instance, view the peaks and lows to better estimate the bandwidth capacity needs for your remote network environment to function efficiently





Remote Network > Monitoring Summary > Peak Vs Allocated Bandwidth

Both the Graphs here show Bandwidth Usage for Top-5 Sites, the Site names are retrieved from Prisma Access.

The Top 5 Sites trends with Peak bandwidth Utilization shows the total Bandwidth utilized by Top-5 Sites. The Trend graph shows the real usage in Mbps.

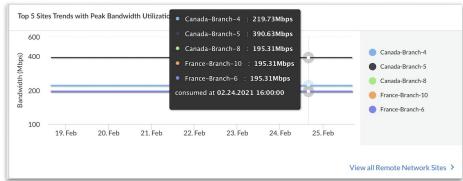
The Bar Graph shows the Top-5 Site with the percentage of Consumed Bandwidth of the Allocated Bandwidth.

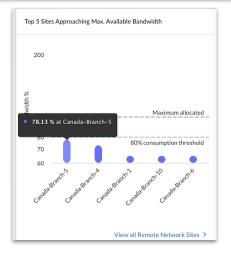
Canada-Branch-5: 780 Consumed / 1000 Allocated is only 78.13% Usage.

Canada-Branch-6: 65 Consumed / 100 Allocated is 65% High Usage.

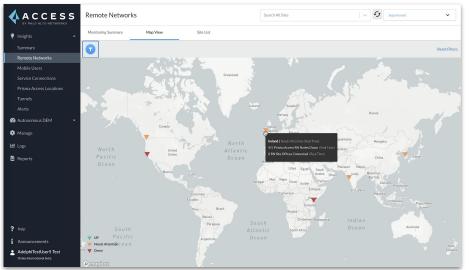
In the Above Example, Canada-Branch-5 needs to be monitored even though the Peak bandwidth may not be in the Top-5. This site may require higher bandwidth Allocation.

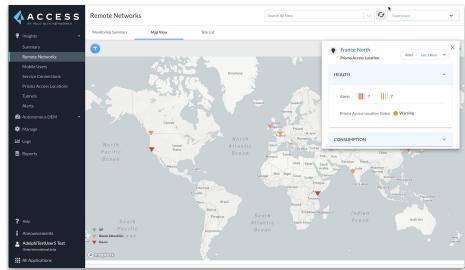
Hover over the Bar to get the details of consumption percentage and the exact bandwidth usage value.





Remote Network > Map View (New)





Get a bird's eye view of all the Prisma Access Locations deployed across all regions in Real Time with this map view .

Hover over the location icon to view the number of RN nodes down of the total number of RN nodes and the site offices connected Click on the Location icons in the map to open a side panel which shows health and total consumption details of the Prisma Access Locations for all Sites that are connected here:

- Health: Alerts, Status
- Consumption: Total sites connected, Peak bandwidth Usage

Remote Network > Site List

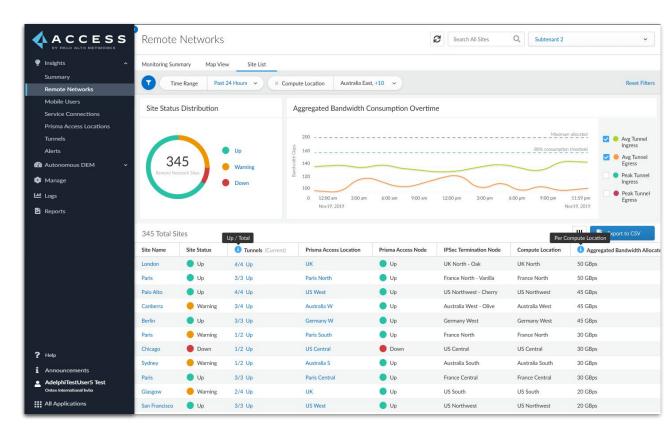
Lists all the Sites and their details in one Tab.

Site Status widget shows the Status of all the Sites configured.

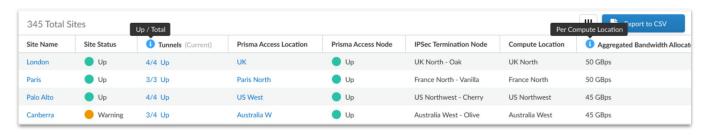
Click on any Color to filter the Sites List Below. Click again to remove the filter.

The trend of **Aggregated Bandwidth Consumption** across all the Remote Networks is displayed and you can switch between the avg tunnel ingress/egress and peak tunnel ingress/ egress to understand the consumption against the threshold and maximum allocated.

By default, the latest Datapoint is selected. You can click on other Data Points to show the Status and Details of the Sites Below.



Remote Network > Site List



The Site list can be exported in the CSV Format.

Total Sites:

The Sites have different Site Status based on the status of the tunnel or the Prisma Access Nodes.

Site Status: Shows the status of the customer device on their Branch, down status will indicate a problem on the Site device or the Tunnel Configuration.

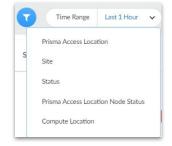
You can see the **Prisma Access Locations** to which the Sites are terminating the tunnels and the **Prisma Access Node** status on that Compute Location. A Down State will indicate action needs to be taken by the Palo Alto Networks Team.

IPSec Termination Node is the name of the RN-SPN which is deployed for that compute Location.

Peak Bandwidth shows the peak usage by the Site based on the Time Range and the Datapoint selected on the above Trend Graph

Avg Bandwidth based on the time filter chosen the value is computed as avg bandwidth consumed by the Site

Click on any Sites name to get the Site Details.



We also have more filters available, which can be used to show Specific Sites.

Remote Network > Site List > Site Details

The Site Details shows the data about a single Site.

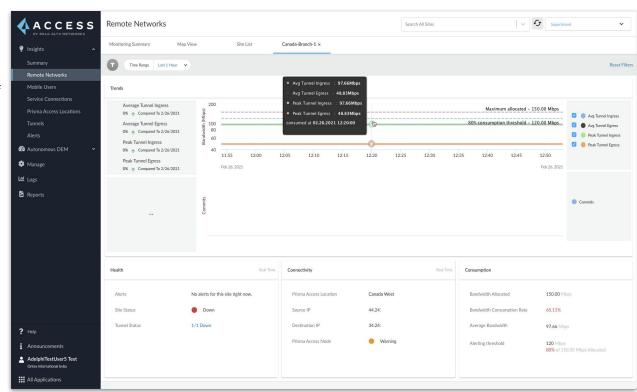
You can see the **Bandwidth Consumption Trend** broken down by Avg and Peak
Tunnel Ingress and Egress in the context of
Allocated Bandwidth.

Mouse hover shows the exact value.

View the overall **health** of the site by alerts, site status and tunnel status which shows the number of tunnels down for that site

Connectivity: view the Prisma Access Node the remote network is connected to along with its status, the Source and Destination IP

Consumption: shows the bandwidth allocated for this site out of the aggregate bandwidth allocated, the alerting threshold and average bandwidth



Mobile Users

Mobile Users > Monitoring Summary

Shows the Summary View of the Mobile Users like Open Alerts, PA Location Status, user Login Count.

Top 5 Open Alerts by Severity:

It gives the current health of the Mobile User Nodes.

Mobile Users:

Mobile Users always show the number of Unique users logged in the last 90 days to compare with the license. And the time range filter does not apply here.

The Maps Shows all the MU locations on-boarded.

Top 5 Active PA Locations:

The bar graphs show the most active Mobile User Locations based on the number of Connected Users at that time..

Search All Mobile Users:

You can directly search for a user name in Search All Mobile Users. Type or select a Username to directly go to the User Details Tab. Make sure that we type the full user name as it shows in the GlobalProtect logs.



Mobile Users > Monitoring Summary

Connected Users:

Shows the number of active users at a specific time.

The datapoint value changes based on the Time Range selected:

For 15 Min or 1 Hour: it is the number of connected users per minute

For 24 Hours: it is an average of connected users per hour

For 7 Days or 30 Days: it is an average of connected users per day

Mouse Hover the trend graph to see the Connected Users.

The last datapoint is the latest number of Connected Users in the Prisma Access Environment.

GlobalProtect Version Distribution:

The total number of new **connections** in the Time Range selected.

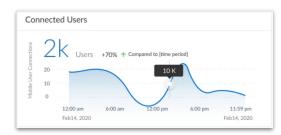
A **Connection** is a combination of Unique user-id, GP App version and OS platform.

It also shows the distribution of the GP App version for the new Connections. Mouse Over shows the number of users with the specific GP App Versions.

This data can be used to enforce compliance with the latest GP App version.

IP Pool Reaching Max Capacity:

The IP pool utilization percentage is the number of IP addresses assigned to Mobile Users across all subnets from the total IP allocated across all subnets of the region. You can take Proactive actions by adding Subnets when you see IP Pool Reaching Max capacity for any region.







Mobile Users > Map View

Map View shows all the Mobile User locations and their status on a map. The dark green dots represent the users location.

Mouse hover on a MU location and the User to see the number of User Logins.

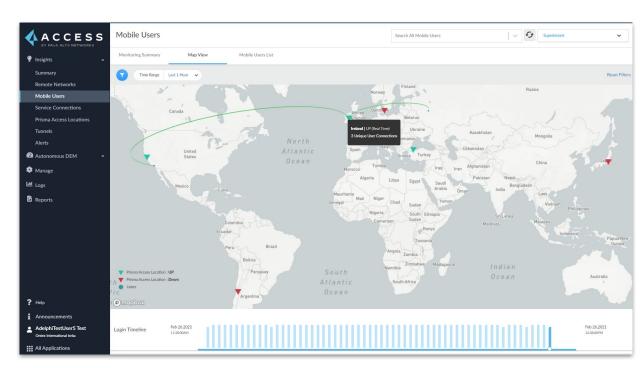
Click on a MU gateway location to show the flight path view from all the user locations. Click anywhere on the map to show the default Map View.

Login Timeline:

By default, the last Datapoint is selected, to get details of the other time select other bars.

Hover the bars to get the User login out of Unique Users count.

Based on the Filters and Datapoints in Login Timeline, the list below is updated.



Mobile Users > Mobile User List

Unique Mobile Users:

The trend graph shows the Unique User Logins for each Datapoint. Hover mouse to get the number for a specific time.

The data in the below Mobile User list updates based on a datapoint selected on the trend graph.

Unique Mobile Users Connected over Time shows the total number of unique users connected from the total licensed.

Last login Time:

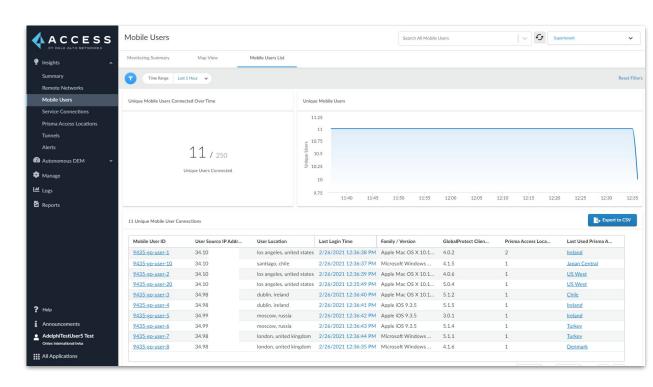
Show the latest login time even if the customer logged in multiple times.

Prisma Access Location:

shows the number of different Gateway Locations the same User connected to.

Last Prisma Access Location:

The last Gateway Location where the User connected to.



Mobile Users > Map User List > Mobile User Details

Trends:

The bar graph shows the Locations where the User connected and the login counts.

Hover the mouse to see the values of login counts per location and Click on the location name to filter the User Logins.

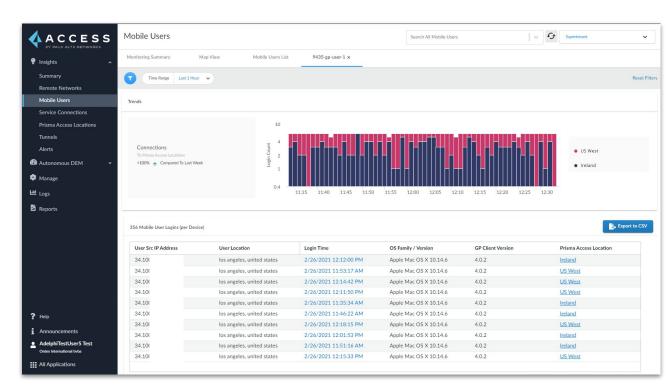
By default, data for all Datapoint is displayed at the same time, the last datapoint is not selected.

Mobile user logins (per Device):

Show all the user login with the details.

A single User connected to multiple locations in a very short period could be an anomaly.

The login data can give details about the Users login behavior and activity.



Service Connections (New)

Service Connections > Monitoring Summary

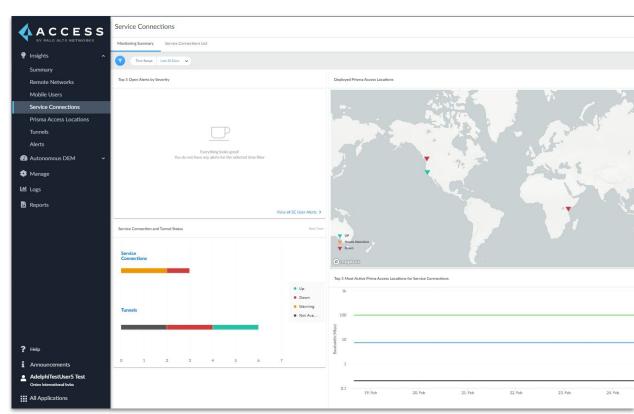
Shows the Summary View of the Service Connections like Alerts, PA Location Status, Service Connections, Tunnel Status, and Bandwidth Utilization.

Top-5 Alerts by Severity to get the current issues on the SCs and if there is an action required.

Click into View all alerts to view all the alerts in the Prisma Access infrastructure in the Alerts dashboard

Gauge overall status of the **Service Connections and Tunnels,** the status is similar to what we have for Remote Networks.

Assess all the utilization metrics by analyzing the Top 5 most active Prisma Access Locations



Service Connections > Service Connection List

Lists all the Service Connections and their details in one tab.

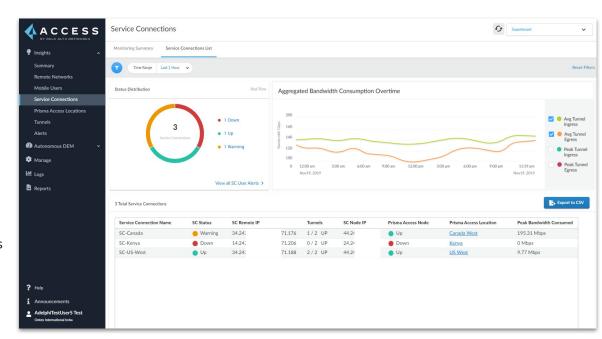
Status Widget shows the Status of all the Service Connections configured. Click on any Color to filter the Sites List Below. Click again to remove the filter.

The trend of **Aggregated Bandwidth Consumption** across all the Service Connections is displayed.

You can switch between the Avg Tunnel Ingress/ Egress and peak tunnel Ingress/ Egress to understand the consumption against the threshold and maximum allocated

Apart from the standard information we have also added the **SC Remote-IP** and **SC Node IP** in the Service Connection list.

By default, the latest Datapoint is selected. You can click on other Data Points to show the Status and Details of the Service Connections below.



Prisma Access Locations

Tunnels



Prisma Access Locations

Shows all the Prisma Access Locations for Remote Networks and Mobile Users.

The Top 5 Locations for Remote Networks is based on the total bandwidth consumed for the selected time range

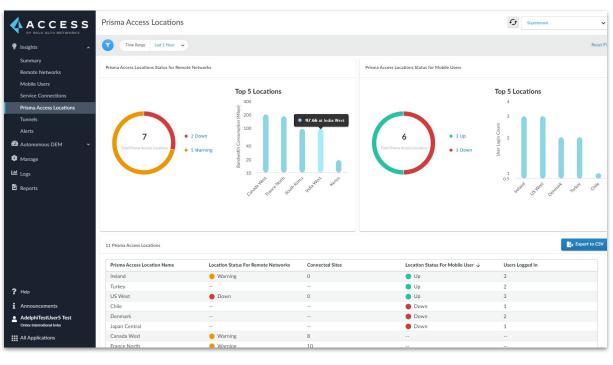
The Top 5 Locations for Mobile Users is based on the total Unique Login count during the selected time range

The Locations list below shows all the onboarded Prisma Access Locations with RN or MU or Both.

Export the list of Prisma Access Locations and their details for additional transformations

Prisma Access Location Status:

- UP when all the nodes at the locations are up
- Down when all the nodes at the locations are down
- Warning If any one or more nodes are down



Tunnels

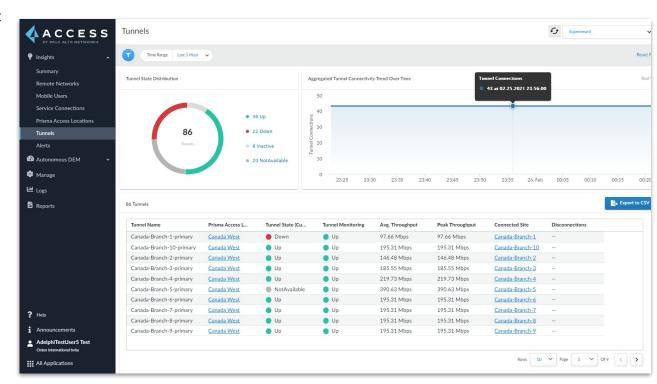
The Circle Chart shows all the RN and SC tunnels configured and their status. Mouse over to see the tunnel status counts. Click to filter the tunnel list below.

The line graph over the right shows the number of tunnels over different times. Click on other Datapoints to check the status for that time.

The **Tunnels List** shows the details of each Site and the tunnels. Site the Tunnel names are retrieved from the Prisma Access Onboraded config.

Average Throughput: Amount of traffic via the tunnel
Peak Throughput: peak amount of traffic through the tunnel

Disconnections: Number of times the Sites disconnected from the Prisma Access Nodes in the Time Range and at the Datapoint selected.





Alerts List

Insights alerts you when something is not right in your Prisma Access environment.

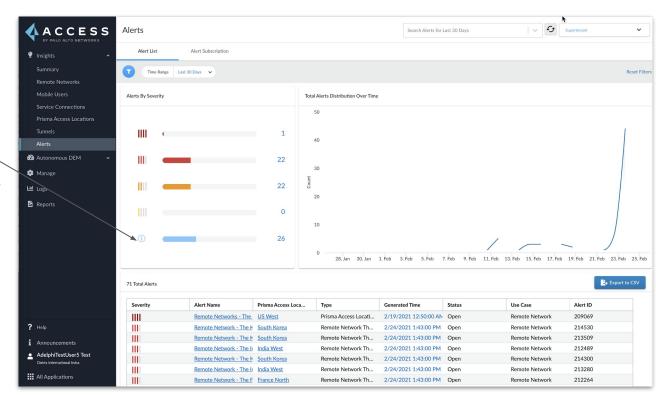
View all the alerts generated in the Prisma Access Environment by severity. The last category of alerts shown in blue are ones for system upgrade

Drill down and filter to the category of filters you wish to see by clicking on the bars in the widget

The line graph shows the number of alerts for a specific time in the selected time range.

The Alters Lists show the details of All the Alerts and Open Alerts of them.

Click on the Alerts link to get more details.

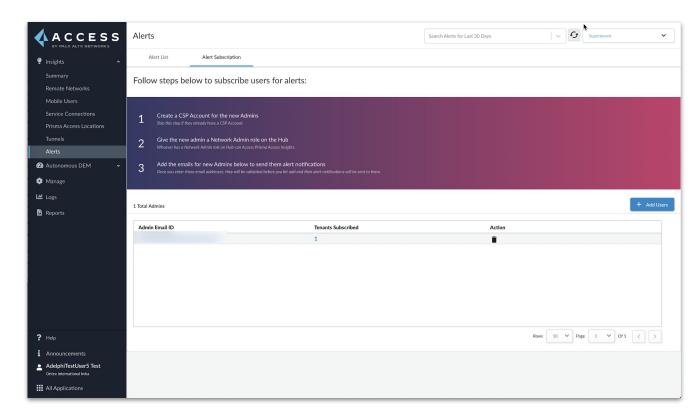


Alers Subscription

Insights enables you to set up alert notifications so that you can receive alerts directly in your email inbox.

We can add an email address in the settings page to receive Alert Notifications.

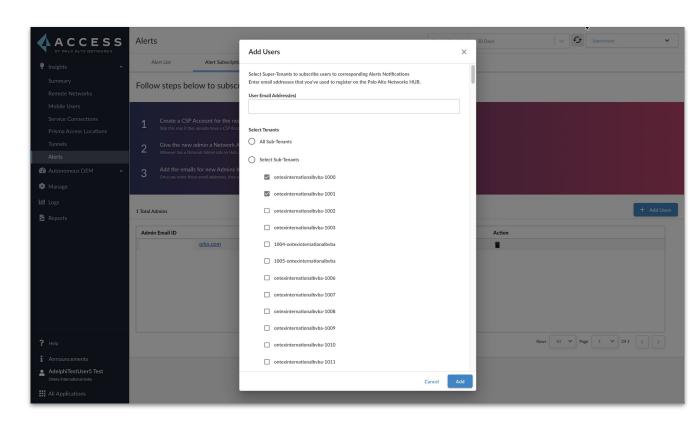
The user should be a member of the CSP Account. The user must be an Insights admin.



Alerts Subscription - Multi tenants (New)

With Multi-tenancy you should be able to select the specific sub-tenants that you would like to receive notifications about

Add the list of emails for users you want to a get alerts for a specific subtenant

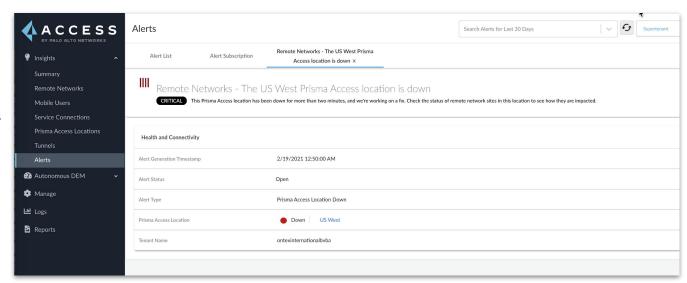


Alerts Details

Alerts Details describes the issue, giving you contexts like if the issue is on the Prisma Access Infrastructure or customer side.

Alert will be resolved only when the issue that triggered the Alert is fixed. Alerts can not be resolved manually.

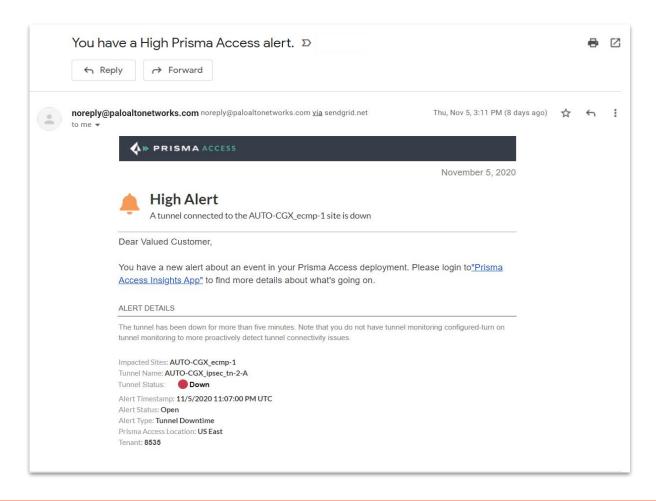
This alert indicates that the Prisma Access location may be down and when the node went down. Also view the tenant name now in addition to the other details



Alerts Email

The alert notifications emails describe the issue and impact and include a link to Insights where you can investigate further.

The Palo Alto Networks email address from which you receive alert notifications is noreply@paloaltonetworks.com.





Thank you



paloaltonetworks.com

